Abstract of the Disclosure
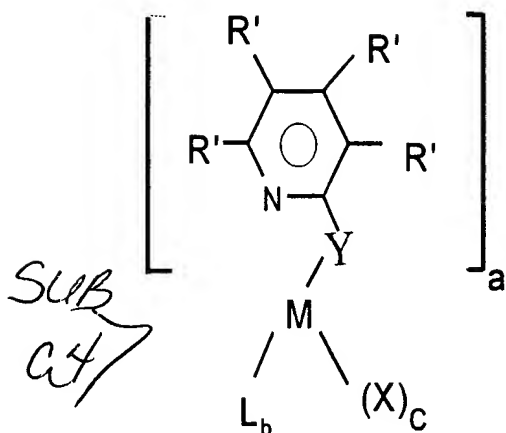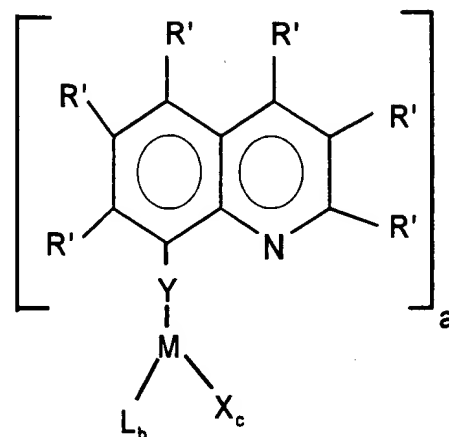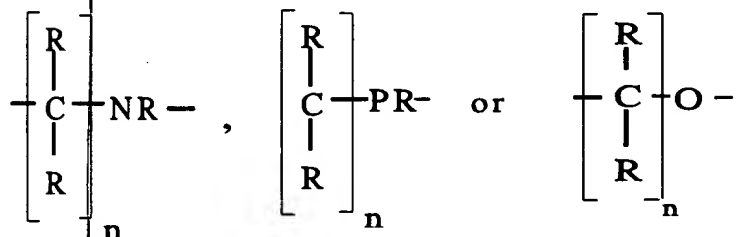
Disclosed is a novel bidentate pyridine transition metal catalyst having the general formula

where Y is O, S, NR,

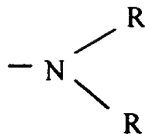each R is independently selected from hydrogen or C_1 to C_6 alkyl, or C_6 to C_{14} aryl,

each R' is independently selected from R, C_1 to C_6 alkoxy, C_6 to C_{14} aryl, C_7 to C_{20} alkaryl, C_7 to C_{20} aralkyl, halogen, or CF_3, M is a Group 3 to 10 metal, each X is independently selected from halogen, C_1 to C_6 alkyl, C_6 to C_{14} aryl, C_7 to C_{20} alkaryl,

5

C$_7$ to C$_{20}$aralkyl, C$_1$ to C$_6$ alkoxy, or

$$-N\begin{array}{c}R\\\\R\end{array}$$

L is X, cyclopentadienyl, C$_1$ to C$_6$ alkyl substituted cyclopentadienyl, indenyl, fluorenyl, or
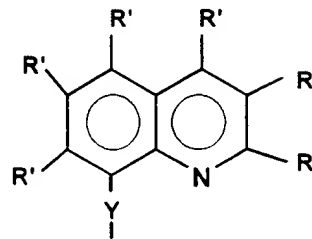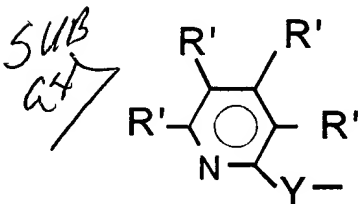
"n" is 1 to 4;

"a" is 1 to 3;

"b" is 0 to 2;

a + b ≤ 3;

"c" is 1 to 6; and

a + b + c equals the oxidation state of M.